Amendments to the Claims

Please amend claims 1, 2, 10, 18 and 19 as shown in the following listing of claims. This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (currently amended) A sound reproduction or recording system comprising an audio signal input, an audio signal processor and an audio signal output wherein the audio signal processor comprises an attributor for attributing a gain factor to input signals as a function of input level with a functional relationship such that the functional relationship between the gain factor and the input level comprises a first and second range, the first range covering amplitudes in which mainly voiced phonemes are situated, the second range situated at input levels ~~(y)~~ lower than those for the first range and covering input levels in which mainly unvoiced phonemes are situated, wherein the average gain factor for the first range is greater than the average gain factor for the second range ~~wherein the functional relationship is~~ such that the average gain factor for the first range lies at least 6 dB below that for the second range ~~and the average gain factor for the second range is greater than zero~~.

2. (currently amended) A sound reproduction or recording system comprising a digital audio signal input, a digital audio signal processor and a digital audio signal output wherein the digital audio signal processor comprises an attributor for attributing a gain factor to input signals as a function of input level, wherein the functional relationship between the gain factor and the input level is such that a first and second range are present, the first range extending from a maximum value input level downwards at least 10 dB, the second range extending at input levels below the first range, said second range covering a range of 10 db or more, wherein the average gain factor for the first range is greater than the average gain factor for the second range such that ~~wherein~~ the average gain factor in the first range is at least on average 6 dB lower than in the second range ~~and the average gain factor for the second range is greater than zero~~.

3. (previously presented) A sound reproduction system as claimed in claim 2, wherein the attributor is arranged such that the first range extends from the maximum value input level at least 15 dB, but not more 30 dB.

4. (previously presented) A sound reproduction or recording system as claimed in claim 1 wherein the attributor is arranged such that the gain factor in the first range is at least 12 dB lower than in the second range.

5. (previously presented) A sound reproduction or recording system as claimed in claim 1, wherein the attributor is arranged such that the average gain factor for the first and second ranges is less than 3 dB.

6. (previously presented) A sound reproduction or recording system as claimed in claim 1, wherein the system comprises a dynamic level detector having an input for the signal amplitude and an output for providing an average level over a predetermined time period.

7. (previously presented) A sound reproduction or recording system as claimed in claim 6, wherein the predetermined time period is 1 to 5 milliseconds.

8. (previously presented) A sound reproduction or recording system as claimed in claim 1, wherein the attributor is arranged such that the gain factor in the first range is on average below 6 dB.

9. (previously presented) A sound reproduction or recording system as claimed in claim 1, wherein the system comprises a determinator for determining a maximum input level of a received signal and a means for equating the maximum input level with the upper edge of the first range.

10. (currently amended) A sound reproduction or recording system as claimed in claim 1, wherein the attributor is arranged such that the functional relationship between the gain factor and the input level is such that between the first and

second ranges a third, intermediate range ~~(III)~~ is present in which the gain factor changes gradually.

11. (previously presented) A sound reproduction or recording system as claimed in claim 1, wherein the system comprises a sensor for measuring background noise, and an adjustor for adjusting the gain factor in the second range in dependency on the measured background noise.

12. (previously presented) A sound reproduction or recording system as claimed in claim 1, wherein the attributor is arranged such that the second range is, at a lower boundary value juxtaposed by a fourth range in which the gain factor is substantially zero.

13. (previously presented) A sound reproduction or recording system as claimed in claim 12, wherein the attributor is arranged such that the second and fourth ranges are separated by a fifth, intermediate range within which the gain factor gradually changes.

14. (previously presented) A sound reproduction or recording system as claimed in claim 12 wherein the attributor is arranged such that that the slope of the decrease in the gain factor in the third range is softer than the rise in gain factor in the fifth range.

15. (previously presented) A sound reproduction or recording system as claimed in claim 12, wherein the system comprises a measurer for measuring line or transmission noise or an input for a value for line or transmission noise and an adjustor for adjusting the transition point or transition range from the second range to the fourth range in dependence on amount of line or transmission noise.

16. (previously presented) A sound reproduction system as claimed in claim 1, wherein the sound reproduction system is a mobile telephone system.

17. (previously presented) A sound reproduction system as claimed in claim 1, wherein the signal processor is a digital signal processor.

18. (currently amended) A method for audio signal enhancement in or for a sound reproduction or recording system in which an incoming audio signal is processed wherein input signals are multiplied with a gain factor, said gain factor being a function of input level, wherein the functional relationship between the gain factor and the input level is such that first and second ranges for the gain factor are present, the first range covering amplitudes in which mainly voiced phonemes are situated, the second range situated at input levels lower than those for the first range and covering input levels in which mainly unvoiced phonemes are situated, wherein the average gain factor for the first range is greater than the average gain factor for the second range ~~wherein the functional relationship is~~ such that the average gain factor for the first range lies at least 6 dB below that for the second range ~~and the average gain factor for the second range is greater than zero~~.

19. (currently amended) A method for audio signal enhancement in or for a sound reproduction or recording system wherein input signals are multiplied with a gain factor, said gain factor being a function of input level, wherein the functional relationship between the gain factor and an input level is such that first and second ranges for the gain factor are present, the first range extending from a maximum value input level downwards at least 10 dB, the second range extending at input levels below the first range, said second range covering a range of 10 db or more, wherein the average gain factor for the first range is greater than the average gain factor for the second range such that ~~wherein~~ the average gain factor in the first range is at least on average 6 dB lower than in the second range ~~and the average gain factor for the second range is greater than zero~~.

20. (previously presented) A method for audio signal enhancement as claimed in claim 18 wherein the functional relationship between the gain factor and the input level is such that the gain factor in the first range is at least 12 dB lower than in the second range.

21. (previously presented) A method for audio signal enhancement as claimed in claim 18, wherein the functional relationship between the gain factor and the input level is such that the average gain factor is less than 3 dB.

22. (previously presented) A method for audio signal enhancement as claimed in claim 18, wherein the functional relationship between the gain factor and the input level is such that the first and second ranges are separated by a third, intermediate, range in which the gain factor changes gradually.

23. (previously presented) A method for audio signal enhancement as claimed in claim 18, wherein the functional relationship between the gain factor and the input level is such that the second range is, at a lower boundary value, juxtaposed by a fourth range in which the gain factor is substantially zero.

24. (previously presented) Method for audio signal enhancement as claimed in claim 23, wherein the functional relationship between the gain factor and the input level is such that the second and fourth ranges are separated by a fifth, intermediate, range within which the gain factor gradually changes.

25. (previously presented) Method for audio signal enhancement as claimed in claim 22, wherein the functional relationship between the gain factor and the input level is such that the slope of the decrease in the gain factor in the third range is softer than the rise in the gain factor in the fifth range.

26. (previously presented) Method for audio signal enhancement as claimed in claim 18, wherein the functional relationship between the gain factor and the input level is such that unvoiced phonemes are at least 6 dB more enhanced than voiced phonemes.

27. (previously presented) Method for audio signal enhancement in a sound reproduction system in which an incoming audio signal is digitally processed wherein input signals are multiplied with a gain factor, said gain factor being a function of input level, wherein the functional relationship between the gain factor

and the input level is such that unvoiced phonemes are at least 6 dB more enhanced than voiced phonemes, wherein the gain factor for both the unvoiced phonemes and voiced phonemes is greater than zero, the gain factor for the unvoiced phonemes being fixed at a particular level, the gain factor for the voiced phonemes being varied such that the gain factor is decreased inversely with respect to the input level of the voiced phonemes.

28. (previously presented) Method for audio signal enhancement as claimed in claim 27, wherein the functional relationship between the gain factor and the input level is such the overall loudness increase is less than 3 dB.

29. (previously presented) Computer program comprising program code means for performing a method in accordance with claim 18 when said program is run on a computer.

30. (previously presented) Computer program product comprising program code means stored on a computer readable medium for performing a method as claimed in claim 18 when said program is run on a computer.

31. (previously presented) Computer program product comprising program code means for use in a system as claimed in claim 1, for performing the action specific for the invention.